

A NEW SPECIES OF *TALLAPERLA* (PLECOPTERA: PELTOPERLIDAE) FROM NORTH CAROLINA, U.S.A.¹

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ABSTRACT: A new species of *Tallaperla*, *T. maiyae*, is described from Wilkes County, North Carolina, U.S.A. from two males. The new species is similar to *T. maria* and *T. anna*, but can be distinguished by the combination of a prominent spine-like epiproct and brown coloration.

KEY WORDS: Plecoptera, stonefly, *Tallaperla*, new species, North Carolina, U.S.A.

Stark (1983, 2000) reviewed the eastern Nearctic roachfly genus *Tallaperla*, recognizing six species distributed mainly along the Appalachian Mountains. Recent collecting in North Carolina revealed an additional distinctive species related to *T. maria* (Needham and Smith) and *T. anna* (Needham and Smith). The description follows the style of Stark (2000).

Tallaperla maiyae, new species Kondratieff, Kirchner, and Zuellig (Figs. 1-2)

Adult. Male. Macropterous. Forewing length 13-14 mm. General color brown. Epiproct sclerite extending laterally around membranous cowl; mesal part of sclerite an erect prominent spine (Fig. 1). Knob 2.0X wide as long (Fig. 2), margined with black hairs. Paraprocts acute (Fig 2).

Female. Unknown.

Type Data: Holotype ♂: U.S.A., North Carolina, Wilkes County, Middle Fork Reddies River, Old NC 16, east of Wilbur, N 36.2189 W 81.30073, 2 May 2005, B. C. Kondratieff, R. F. Kirchner, R. E. Zuellig, and D. R. Lenat (USNM). Paratype ♂, same data as holotype. The holotype will be deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C. (USNM), paratype male in the Colorado State University C. P. Gillette Museum of Arthropod Diversity, Fort Collins, Colorado (CSUC).

Etymology. The patronym continues the use of female names for this genus, and honors the senior author's daughter, Maiya L. Kondratieff.

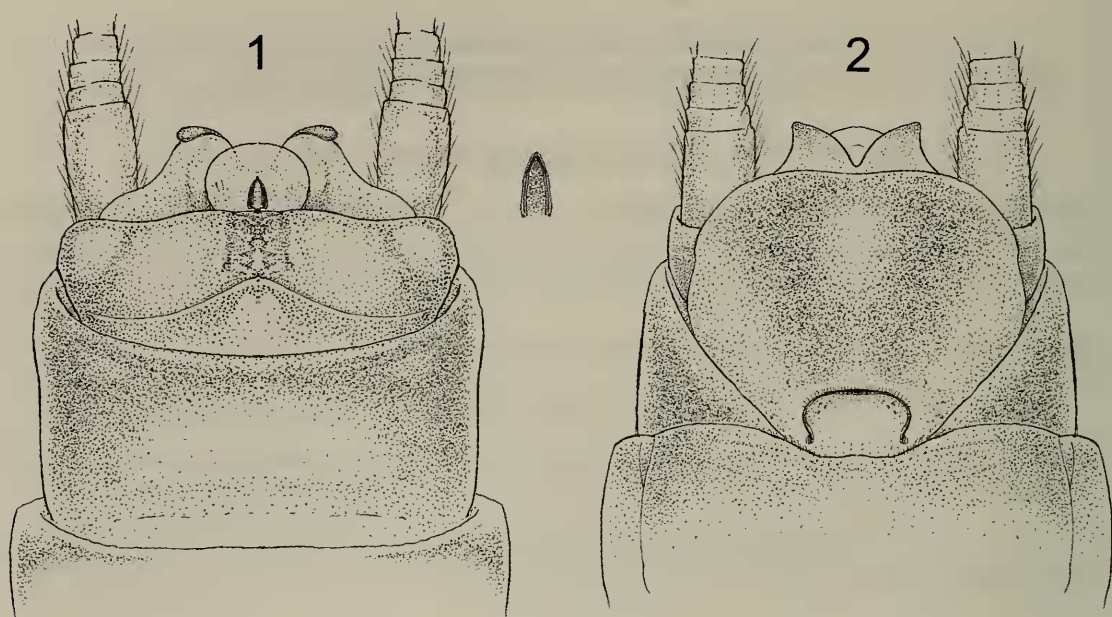
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Figures 1-2. *Tallaperla maiyae* male genitalia. 1. Dorsal aspect, inset epiproct. 2. Ventral aspect.

Diagnosis. Males of *T. maiyae* are most similar to *T. maria*, but can be distinguished by the prominent, erect, central spine-like epiproct sclerite. In *T. maria*, the epiproct sclerite is variable, usually slender mesally and poorly developed laterally (Stark 2000, see Fig. 4.18). The upright central spine-like epiproct sclerite is similar only to *T. anna* (Needham and Smith), but the yellow-brown body color of *T. anna* easily separates it from the brown body color of *T. maiyae*.

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LITERATURE CITED

- Stark, B. P. 1983. The *Tallaperla maria* complex of eastern North America (Plecoptera: Peltoperlidae). *Journal of the Kansas Entomological Society*. 56: 398-410.
- Stark, B. P. 2000. Peltoperlidae (The roachflies). pp. 41-54. In *Stoneflies (Plecoptera) of Eastern North America Volume I. Pteronarcyidae, Peltoperlidae, and Taeniopterygidae*. B. P. Stark and B. J. Armitage (Editors). *Bulletin of the Ohio Biological Survey. New Series* 14: 1-98.